

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

The Proposed Extension of Part 4 of the
Commission's Rules Regarding Outage Reporting
to Interconnected Voice Over Internet Protocol
Service Providers and Broadband Internet Service
Providers

PS Docket No. 11-82

FCC No. 11-74

**COMMENTS OF
THE MASSACHUSETTS DEPARTMENT OF
TELECOMMUNICATIONS AND CABLE**

Commonwealth of Massachusetts
Department of Telecommunications and Cable

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The Massachusetts Department of Telecommunications and Cable (MDTC)¹ respectfully submits these comments in response to the Notice of Proposed Rulemaking (NPRM) issued by the Federal Communications Commission (FCC or Commission) on May 13, 2011, in the above-referenced proceeding.² The Commission seeks comment on extending its current outage reporting rules to interconnected Voice over Internet Protocol (VoIP) service providers and broadband Internet Service Providers (ISPs).³ The primary purpose of extending the reporting requirements is to promote public safety, protect critical infrastructure, and ensure 9-1-1 reliability.⁴

¹ The MDTC is the exclusive state regulator of telecommunications and cable services within the Commonwealth of Massachusetts. MASS. GEN. LAWS ch. 25C, § 1. Effective July 1, 2010, and with limited exception, the MDTC is prohibited from regulating interconnected VoIP and IP-enabled services. *See* St.2010, ch. 131, § 14 (eff. Jul. 1, 2010), *codified at* MASS. GEN. LAWS ch. 25C, § 6A (“Voice over internet protocol service and internet protocol enabled service; regulation prohibited”).

² *The Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers*, PS Docket No. 11-82, Notice of Proposed Rulemaking, FCC 11-74 (rel. May 13, 2011) (NPRM).

³ *Id.* at ¶ 1.

⁴ *Id.*

The MDTC encourages the Commission to adopt the proposed outage reporting requirements, which will benefit more than 1 million Massachusetts residential and business subscribers of interconnected VoIP services and more than 2.5 million Massachusetts Internet broadband households.⁵ Extended outage reporting requirements are necessary for reasons inclusive of public safety and offering additional insight into the development of a Next Generation 9-1-1 (NG 9-1-1) network.⁶

I. THE COMMISSION SHOULD EXTEND ITS OUTAGE REPORTING REQUIREMENTS TO INTERCONNECTED VOIP SERVICE PROVIDERS AND BROADBAND INTERNET SERVICE PROVIDERS.

Currently, the Commission requires wireline, wireless, cable, satellite, and paging service providers to submit electronically their outage reports to the FCC via an on-line portal, the Network Outage Reporting System (NORS).⁷ The proposed outage reporting requirements would apply to fixed (facilities-based) and nomadic (non-facilities-based) interconnected VoIP providers, broadband Internet access service providers, and broadband backbone ISPs.⁸ The Commission notes that its “analysis of industry-wide outage reports has led to improvements in the engineering, provisioning, and deployment of communications infrastructure.”⁹ Extending outage reporting requirements to broadband communications networks may help reduce the

⁵ *Local Telephone Competition: Status as of June 30, 2010*, Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, Table 8 (Mar. 2011); *Internet Access Services: Status as of June 30, 2010*, Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, Table 15 (Mar. 2011).

⁶ New and Emerging Technologies 9-1-1 Improvement Act of 2008, Pub. L. No. 110-283, 122 Stat. 2620 (2008) (NET 9-1-1 Act); *Framework for Next Generation 911 Deployment*, PS Docket No. 10-255, Notice of Inquiry, FCC 10-200, at ¶ 1 (rel. Dec. 21, 2010) (opening the proceeding to “gain a better understanding of how the gap between the capabilities of modern networks and devices and today’s [legacy circuit-switched] 911 system can be bridged ... [and seeking] comment on how to further the transition to IP-based communications capabilities for emergency communications and NG911”).

⁷ 47 C.F.R. §§ 4.1-4.13 (Part 4).

⁸ NPRM at ¶¶ 1, 26, 32, 34-35.

⁹ *Id.* at ¶¶ 9-10.

number and severity of significant outages which impact Massachusetts consumers and businesses through additional Commission analysis. In 2010 for example, Massachusetts consumers experienced widespread VoIP phone outages on the eve of the November 2 elections, and, shortly thereafter, widespread broadband outages during “Cyberoutage Monday” to the detriment of local consumers and business sales.¹⁰

As the Commission notes, consumers increasingly view interconnected VoIP service as a substitute for traditional telephone service, and VoIP services depend heavily on the underlying communications network.¹¹ By extending outage reporting requirements to interconnected VoIP providers and broadband ISPs, the FCC may better enforce existing E-9-1-1 obligations and analyze root causes of outages, which will improve the overall communications network performance.

A. Extended outage reporting should be mandatory.

As with its existing outage reporting rules, the FCC proposes to make the extended outage reporting requirements mandatory.¹² The MDTC agrees with this approach. While IP-based service providers have taken substantial steps to ensure their networks’ reliability, performance, and sustainability, the MDTC continues to view these voluntary practices as not removing the critical public safety need for outage data or reporting. The Commission, on a fully developed record, previously discussed and dismissed voluntary outage reporting due to the

¹⁰ See <http://www.thebostonchannel.com/r/25599952/detail.html> (last viewed Jul. 22, 2011); http://articles.boston.com/2010-11-30/business/29326207_1_customer-service-comcast-customer-dns-related (last viewed Jul. 22, 2011).

¹¹ NPRM at ¶ 25.

¹² *Id.* at ¶¶ 56-60.

quality of data submitted.¹³ As the Commission itself notes, previous participation in voluntary network-outage reporting was “spotty,” the “quality of information obtained was very poor,” and there was “no persuasive evidence in the record that ... *all* covered communications providers would voluntarily file accurate and complete outage reports for the foreseeable future or that mandatory reporting is not essential to the development, refinement, and validation of best practices.”¹⁴

Further, as the California Public Utilities Commission (CPUC) observed last year, the FCC’s rationale in updating the outage reporting rules in 2004 which included wireless providers is still applicable.¹⁵ In 2004, the FCC determined that:

Ensuring that the United States has reliable communications requires us to obtain information about communications disruptions and their causes to prevent future disruptions that could otherwise occur from similar causes, as well as to facilitate the use of alternative communications facilities while the disrupted facilities are being restored.¹⁶

The Commission pointed to the terrorist acts of September 11, 2001, as “starkly illustrat[ing] the need for reliable communications during times of crisis.”¹⁷ In the instant NPRM, the Commission similarly discusses events surrounding Hurricane Katrina and the more recent earthquakes in Japan.¹⁸ Taking these events and observations into account, the MDTC firmly

¹³ *New Part 4 of the Commission’s Rules Concerning Disruptions to Communications*, ET Docket No. 04-35, Report and Order and Further Notice of Proposed Rulemaking, FCC 04-188, at ¶¶ 19-47 (rel. Aug. 19, 2004) (*New Part 4 Report and Order*).

¹⁴ NPRM at ¶ 57, citing *New Part 4 Report and Order* ¶¶ 37, 39.

¹⁵ *Public Safety and Homeland Security Bureau Seeks Comment on Whether the Commission’s Rules Concerning Disruptions to Communications Should Apply to Broadband Internet Service Providers and Interconnected Voice over Internet Protocol Service Providers*, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, CPUC Comments, at 7-9 (filed Aug. 2, 2010).

¹⁶ *New Part 4 Report and Order* at ¶ 11.

¹⁷ *Id.* at ¶ 10.

¹⁸ NPRM at ¶ 9 (“[d]uring a time when countless calls were placed to 9-1-1, the Commission’s outage reporting data was the Federal government’s primary and best source of information about the condition of critical communications infrastructure in the disaster area ... The FCC was able to identify specific needs for security, fuel, and other support and help guide and prioritize Federal restoration efforts”); ¶ 58.

believes that the Commission should extend an appropriate level of mandatory outage reporting requirements to broadband ISP and interconnected VoIP providers for use by federal and state authorities in order to further support the health, safety, and welfare of our citizens.

B. Baseline reporting should be relatively comparable among providers.

Last year, the MDTC urged the FCC's Public Safety and Homeland Security Bureau to ensure that baseline provider-specific threshold criteria remain as uniform as possible among different types of communications providers, recognizing inherent differences existing among IP-based and legacy communications providers and their network designs.¹⁹ The MDTC pointed out that such an approach would be in line with the one taken by the Commission when it last extended its reporting rules in 2004.²⁰ At that time, the Commission noted that:

[A]lthough the concept of a uniformly applied common metric is properly based on the number of people potentially affected by, and duration of, an outage, irrespective of the communications system, differences may necessitate variations in developing the metric for these communications networks or even alternative approaches.²¹

The MDTC is pleased to see that the current proposals on which the Commission seeks comment appear to follow this same approach. For instance, as with some of the existing requirements already imposed on cable, satellite, wireless, and wireline communications service providers, the interconnected VoIP and broadband Internet service provider will have to report instances of outages lasting at least 30 minutes: (a) on any major facility that it owns, operates, leases, or otherwise utilizes; (b) potentially affecting generally useful availability and connectivity of at least 900,000 user minutes; or (c) otherwise potentially affecting special

¹⁹ *Public Safety and Homeland Security Bureau Seeks Comment on Whether the Commission's Rules Concerning Disruptions to Communications Should Apply to Broadband Internet Service Providers and Interconnected Voice over Internet Protocol Service Providers*, ET Docket No. 04-35, WC Docket No. 05-271, and GN Docket Nos. 09-47, 09-51, and 09-137, MDTC Reply Comments, at 4-5 (filed Aug. 16, 2010) ("MDTC Reply Comments").

²⁰ *Id.* at 5.

²¹ *New Part 4 Report and Order* at ¶ 50.

offices, or special facilities, including 9-1-1 public safety answering points (PSAPs).²² In addition, the NPRM requires an initial notice within 120 minutes of discovering an outage or loss, an initial report within 72 hours of outage discovery, and a final report within 30 days of outage discovery.²³ Taking into account the specific characteristics of broadband backbone ISPs, the Commission proposes that those type of providers also report instances of outages lasting at least 30 minutes on any major facility that it owns, operates, leases, or otherwise utilizes, but with slightly different requirements.²⁴ To minimize the reporting burdens, the Commission also proposes to use the NORS electronic reporting template already in place.²⁵ Such a relatively uniform system of reporting will help to minimize the reporting obligations imposed on providers and will ease the administrative burden placed on the entities which analyze the data. The Commission's proposed baseline reporting requirements will maintain a relatively uniform level of outage reporting for all communications providers.

C. The Commission has sufficient ancillary authority to extend outage reporting.

As primary legal support for extending its outage reporting requirements, the Commission utilizes its Title I ancillary authority.²⁶ The Commission may exercise its ancillary authority when “(1) the Commission’s general jurisdictional grant under Title I [of the Communications Act] covers the regulated subject and (2) the regulations are reasonably

²² NPRM at ¶¶ 29, 43; 47 U.S.C. § 4.9.

²³ NPRM at ¶ 61; Appendix Proposed Rule § 4.9.

²⁴ NPRM at ¶ 49 (proposing that broadband backbone ISPs report an outage lasting longer than 30 minutes on any major facility: (a) that it owns, operates, leases, or otherwise utilizes; but (b) potentially affecting generally useful availability and connectivity for any Internet Point-of-Presence (“POP”)-to-Internet PoP pair for which they lease, own or operate at least one of the PoPs where the “loss of generally useful availability and connectivity” is defined as: (1) an average packet loss of one percent or greater; (2) average round-trip delay of 100 ms or greater; or (3) average jitter of 4 ms or greater with measurements taken in each of at least six consecutive five-minute intervals as measured from source to destination PoP); Appendix Proposed Rule § 4.9.

²⁵ *Id.* at ¶ 62.

²⁶ *Id.* at ¶¶ 22, 67-72.

ancillary to the Commission’s effective performance of its statutorily mandated responsibilities.”²⁷ The FCC asserts in the NPRM that both interconnected VoIP and broadband services satisfy the first prong of the ancillary authority requirement, since both qualify as “communication[s] by wire or radio” under the statute.²⁸ The Commission states that the second prong is satisfied for interconnected VoIP providers because collecting outage information from those providers is “reasonably ancillary” to ensuring that the providers are able to satisfy their statutory 9-1-1 obligations, and to “enable the Commission to assist in improving the reliability of these mandated services.”²⁹ The Commission also asserts that network outage reporting for broadband ISPs satisfies the second prong because such reporting is “reasonably ancillary to ensuring that interconnected VoIP providers are able to satisfy their 9-1-1 duties under the Act,” and “interconnected VoIP services by definition depend on broadband networks.”³⁰ The Commission points out that “[i]f a broadband network fails, interconnected VoIP traffic – including calls to 9-1-1 – cannot travel over the network.”³¹

As the MDTC discussed last year (and as the Commission noted in the NPRM),³² the Commission has sufficient ancillary authority to extend its outage reporting requirements to interconnected VoIP providers. This authority is best evidenced by the extensive precedent where the Commission has exercised, and courts have upheld, its use of ancillary authority over

²⁷ *Comcast Corp. v. FCC*, 600 F.3d 642, 646 (D.C. Cir. 2010) (quoting *Am. Lib. Ass’n v. FCC*, 406 F.3d 689, 691-92 (D.C. Cir. 2005)).

²⁸ NPRM at ¶¶ 68-69 (citations omitted).

²⁹ *Id.* at ¶ 68 and n.46. See also NET 9-1-1 Act, *supra* at n. 6 (in part amending the 9-1-1 Act and codifying the Commission’s then-existing E-9-1-1 rules for interconnected VoIP providers).

³⁰ NPRM at ¶ 69.

³¹ *Id.*

³² *Id.* at n.147.

interconnected VoIP providers.³³ With regard to extending the same requirements to broadband ISPs, the MDTC supports the Commission’s rationale.

D. *The Commission should grant state entities direct access to outage reporting data.*

The Commission points out that existing outage data is “presumptively confidential” and seeks comment on whether it should share the information with other federal agencies.³⁴

Currently, the Commission grants the Department of Homeland Security (“DHS”) direct access to its outage reporting database, and the DHS acts as an intermediary to share that information with state and local authorities.³⁵ The NPRM contains several recent examples of significant outages in Washington, Texas, Tennessee, and Georgia, as well as a multi-state outage that affected subscribers’ ability to make emergency calls to 9-1-1 and to conduct business.³⁶ One example involved several government entities where the outage inhibited the ability of “local, state, and Federal government department and agency customers ... in the affected areas ... to conduct business via the Internet or make or receive telephone calls.”³⁷

While the MDTC agrees that the FCC should treat the reported information as presumptively confidential, the MDTC is disappointed that the NPRM completely fails to reflect the need for appropriate state entities to retrieve the outage data directly without waiting for the DHS to complete its role as intermediary. State and local entities often serve as the first line of defense for public safety and emergency situations, and delay in acquiring outage data can have

³³ *Id.* (discussing the MDTC’s comments pointing out that, in reliance on its ancillary authority, “the Commission has extended numerous common carrier requirements to interconnected VoIP service providers, including E-9-1-1, federal [Universal Service Fund] contributions, [customer proprietary network information], disability rights access, payment of federal regulatory fees, local number portability, FCC Form 477 data reporting, and discontinuance”).

³⁴ *Id.* at ¶ 66 (emphasis added).

³⁵ *New Part 4 Report and Order* at ¶ 47.

³⁶ NPRM at ¶ 3.

³⁷ *Id.*

serious consequences. The Commission needs to consider the circumstances under which states and localities should have direct access to this information. Instant access to such information during emergency situations such as the recent tornadoes in Western and Central Massachusetts, for instance, would assist state and local authorities in coordinating response efforts in a timely fashion.³⁸ However, access should not be limited to emergency situations alone. As a result, the MDTC reiterates its position from last year – that state-specific information should be made directly available to appropriate state entities.³⁹ In Massachusetts, these entities include both the MDTC and the State 911 Department.⁴⁰ Further, the MDTC reaffirms its support of the CPUC’s pending petition requesting that the Commission provide state public utility commissions direct access to its outage reporting database and incorporates our comments in that proceeding in their entirety here.⁴¹ The MDTC strongly urges the Commission to grant that petition shortly. Finally, the Commission should clearly assert that its updated rules will not preempt existing and future state outage reporting requirements.

³⁸ See Letter from Massachusetts Governor Deval Patrick to President Barack Obama (Jun. 11, 2011) (requesting declaration of a major disaster as a result of destructive thunderstorms and tornadoes that touched down in Massachusetts on June 1, 2011, and describing the effects of those storms and certain federal, state, and local response efforts), available at: http://www.mass.gov/Agov3/docs/Governor_Declaration_Request_June%2011_ocr.pdf (last viewed Aug. 8, 2011).

³⁹ MDTC Reply Comments at 6.

⁴⁰ While the MDTC is the exclusive state regulator of telecommunications and cable services within the Commonwealth of Massachusetts, *supra* at n.1, the State 911 Department is the agency responsible for coordinating, administering and promulgating standards for the implementation of E-9-1-1 services within the state, and is tasked with reviewing and assessing new communications technologies that may include, but are not limited to, wireless, video, broadband, and IP-based applications that may serve as the NG 9-1-1 technology platforms. See MASS. GEN. LAWS ch. 6A, §§ 18B(d) and (h). In addition, the State 911 Department provides E-9-1-1 equipment, database, network and technical support services to all of the state’s primary PSAPs. See State 911 Department website, available at: <http://www.mass.gov/?pageID=eopsagencylanding&L=3&L0=Home&L1=Public+Safety+Agencies&L2=State+911+Department&sid=Eeops> (last viewed Jul. 27, 2011).

⁴¹ *In the Matters of New Part 4 of the Commission’s Rules Concerning Disruptions to Communications; Petition for Rulemaking of California Public Utilities Commission and The People of the State of California for Rulemaking on States’ Access to the Network Outage Reporting System (“NORS”) Database and a Ruling Granting California Access to NORS*, ET Docket No. 04-35, RM-11588, Public Notice, DA 10-220 (rel. Feb. 2, 2010); MDTC Comments, ET Docket No. 04-35, RM-11588, at 2 (filed Mar. 4, 2010).

II. CONCLUSION

The Commission should extend mandatory outage reporting requirements to interconnected VoIP service providers and broadband ISPs. By so doing, the Commission will help to ensure the continued reliability and security of the entire communications infrastructure and 9-1-1 services relied upon by all consumers. The MDTC supports the Commission's proposals to require a baseline level of relatively comparable reporting requirements among communications technologies. Such a relatively uniform level of reporting will not only help to minimize the reporting obligations imposed on providers, but will also ease the administrative burden placed on the entities which review the data. The Commission has more than sufficient ancillary authority to accomplish its objectives. Finally, the MDTC again strongly encourages the Commission extend to state entities direct access to its outage reporting information and database, as well as to grant the CPUC's pending outage reporting database request and not preempt existing and future state outage reporting requirements.

Respectfully submitted,

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